

Dementia Care Centre

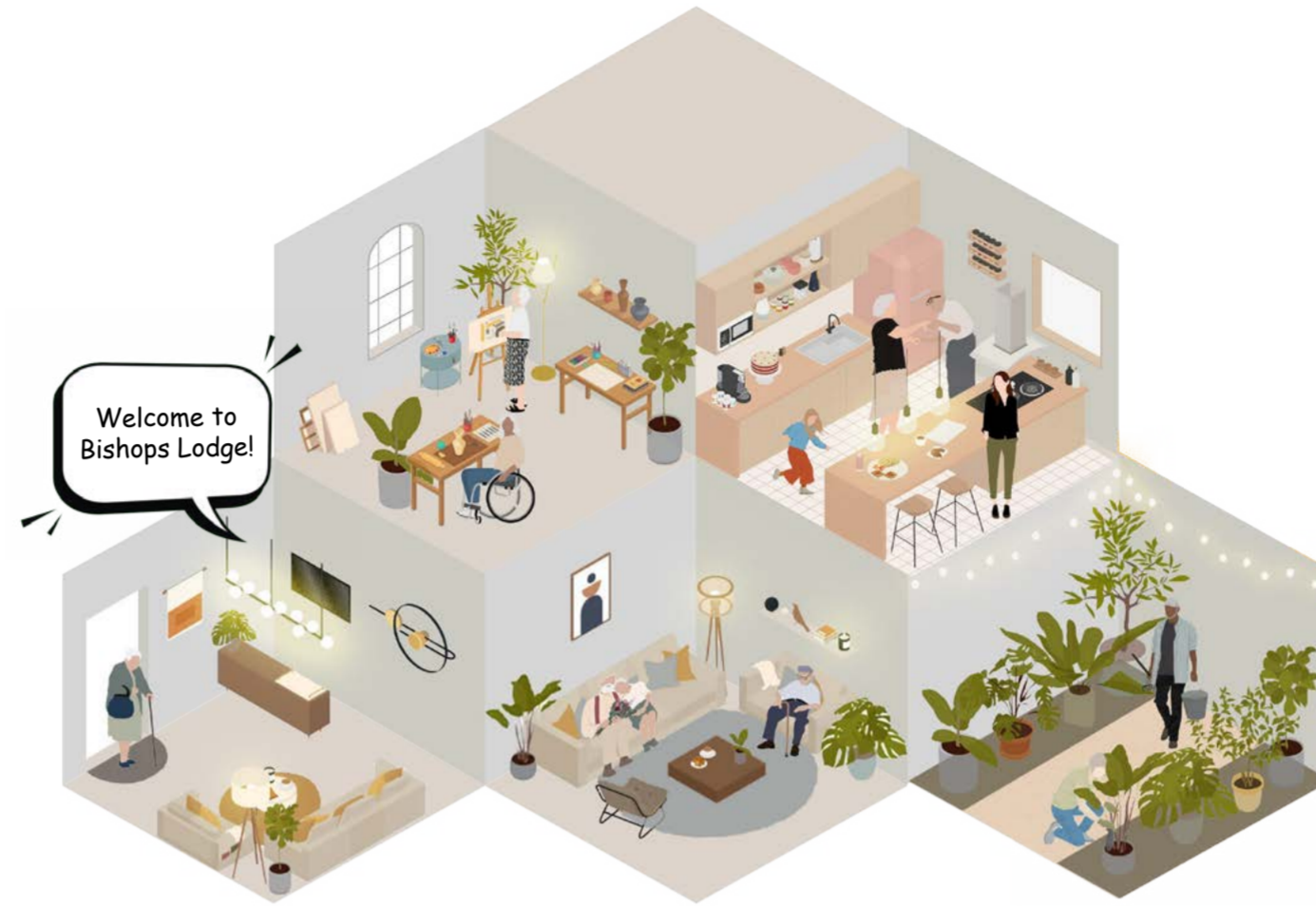


01 Brief

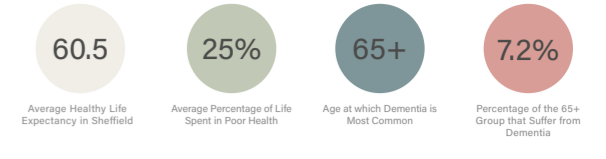
The brief is to design a well-being and care centre for people suffering with dementia, focusing on those who are transitioning into memory loss and how that can effect mental health. The architecture and design of the building should enable these people to create routines, remain independent, have access to on-site care and links to the local health services, socialise with family in a safe environment and partake in a range of enrichment activities. The aim is to create structure and heal the mind before the dementia progresses through wellness methods.

This centre will also cater for the support network around the individuals suffering from dementia. As a family member or friend it can be hard to see your loved one start to forget, this is a place where those support networks can be looked after and prepared for the journey ahead.

This wellness programme should be closely linked to local health services that can provide support to individuals, however the design should be the opposite of the clinical environment seen in these services. The centre should be welcoming and peaceful, a space that emits tranquillity and embodies rest. This should be done through the use of spatial design, material choice, connection to nature and lighting.



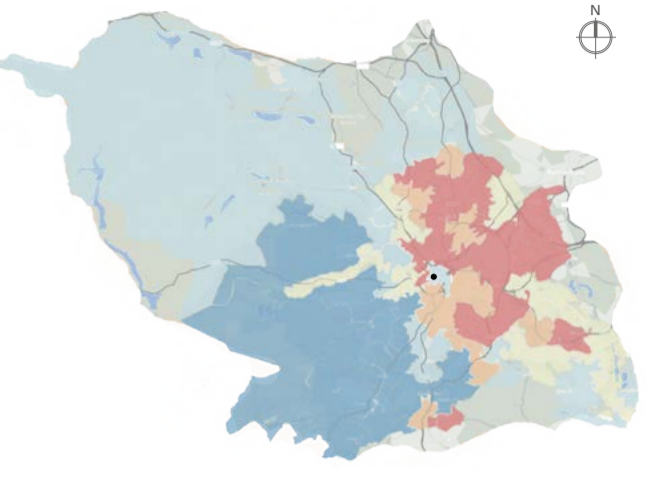
04 Life Expectancy Divide



In Sheffield, life expectancy and healthy life expectancy direction of travel are a similar shape to the national data but the numbers are worse relative to England. What is particularly concerning is that the overall data masks considerable inequality at a local level, with people living in the most deprived areas of the city experiencing both shorter lives and a greater proportion of their lifetime in poor health relative to people in the least deprived neighbourhoods. A baby born in Park Park can expect to live a third of their shorter life with poor health, with a large proportion of that in working age. A baby born in Carterhouse and Millhouses will live a seventh of a longer life with poor health.

It is clear from this data that being born in a more deprived area can significantly reduce an individual's healthy life span. Meaning these people are subject to poor health due to a lack of healthcare access.

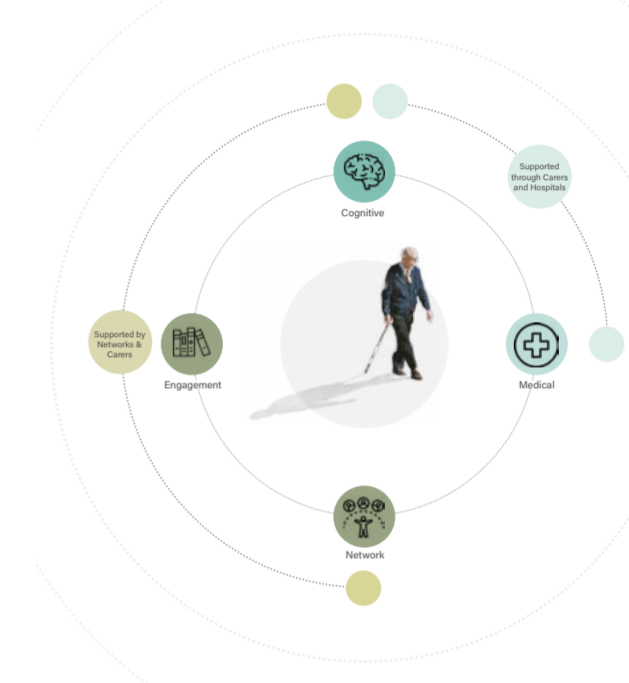
Dementia is more common in these more deprived areas. Individuals in these areas have less access to education, meaning their cognitive brain function is less active through out their lives. Due to the lack of educational opportunities these individuals are forced into low wage labour. With a low income it can be a struggle to buy certain health products or insurance, creating a greater risk of disease or poor health.



Healthy life expectancy at birth (2009-2012)

- 54.4 - 55.0 years of age
- 55.1 - 56.2 years of age
- 56.1 - 61.4 years of age
- 61.5 - 66.7 years of age
- 66.8 - 73.4 years of age

● Site Location



08 Supporting The Journey

How can we reduce the effects of Dementia?

Transitioning from a normal life into living with dementia is a difficult experience. However there are things we can do to mitigate the effects of dementia, well being is at the heart of dementia care so everything that we do should be done to support and enrich their lives.

This diagram shows the process and networks that this building aims to build upon. Studies show that there are many ways we can help people with dementia and potentially reduce effects.

Through cognitive activities and exercises we can increase brain activity and mitigate cognitive decline.

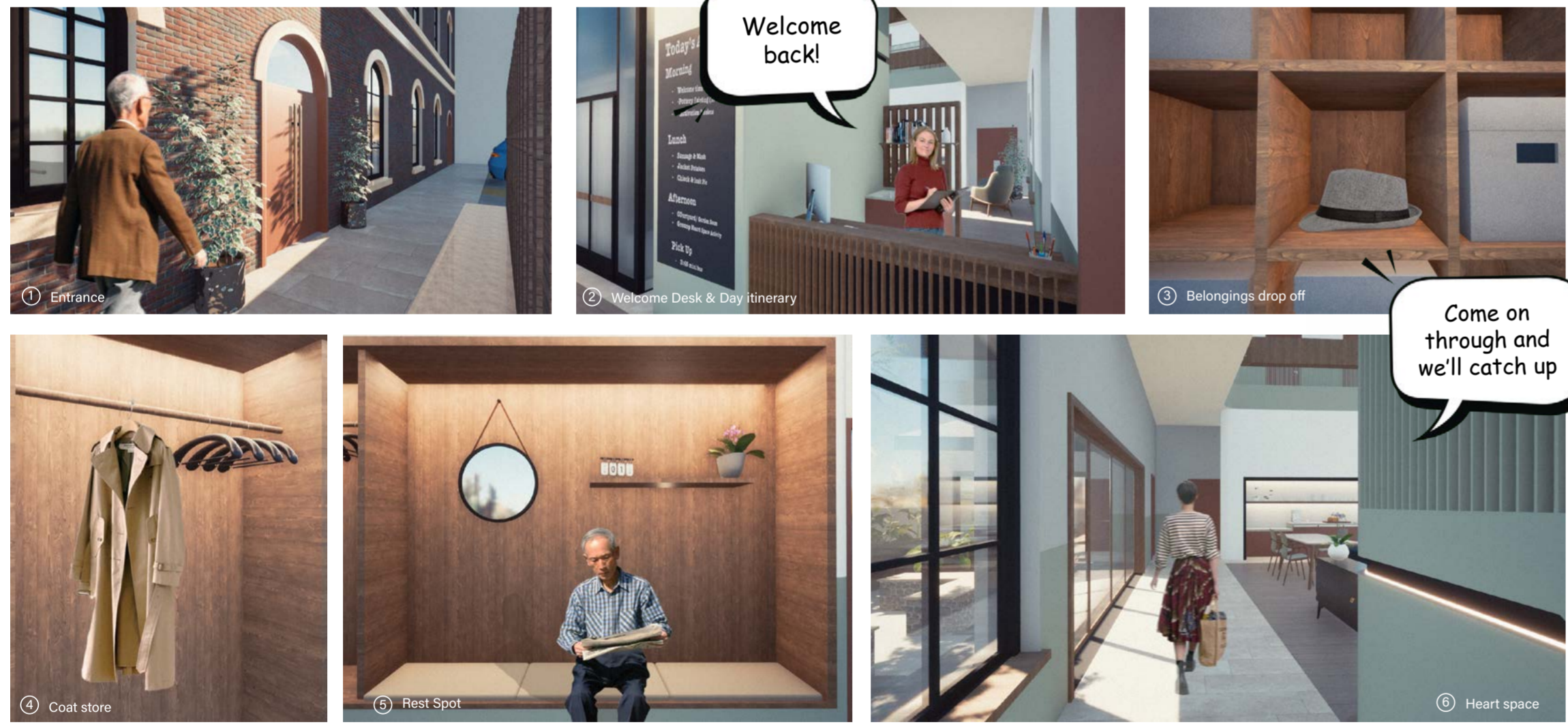
Medical health is important for these individuals, dementia can lead to other physical symptoms so these people need to be well cared for and treated with health care services.

It is important for people living with dementia to retain their existing networks, the family and friends but also engage with new people and stay social, this can help to lift a lot of the burden of feeling isolated and increase their mental health.

Finally, through engagement in creative activities, culture and exercise we can positively enrich these people's lives and give them and their networks a happy and safe place to engage.

Some of those activities will include:

- Walking & Exercise
- Art & Music
- Screen & Computer
- Learning & Play
- Exercise
- Gardening

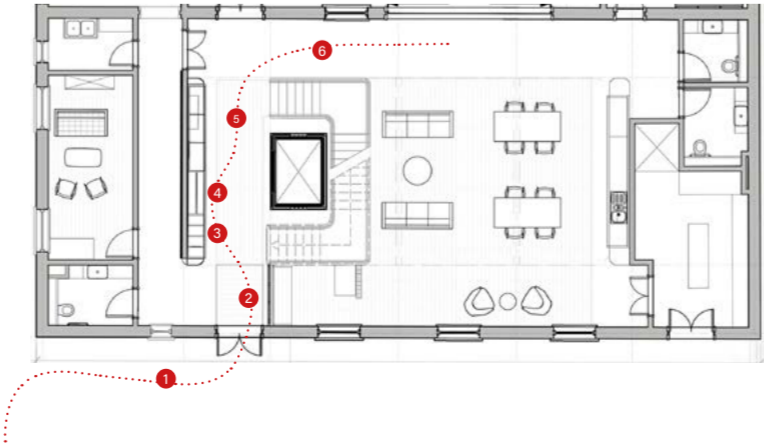


22 A Familiar Welcome

Spaces and Moments

Throughout the building certain spaces are designed with familiarity at the heart. The entrance space aims to imitate a hallway found in an individuals and follow the steps someone might take after coming home. Small moments like taking your coat and hat off and sitting down to untie your shoelaces are captured here. The process is brought to life through a built in piece of furniture that houses the moments.

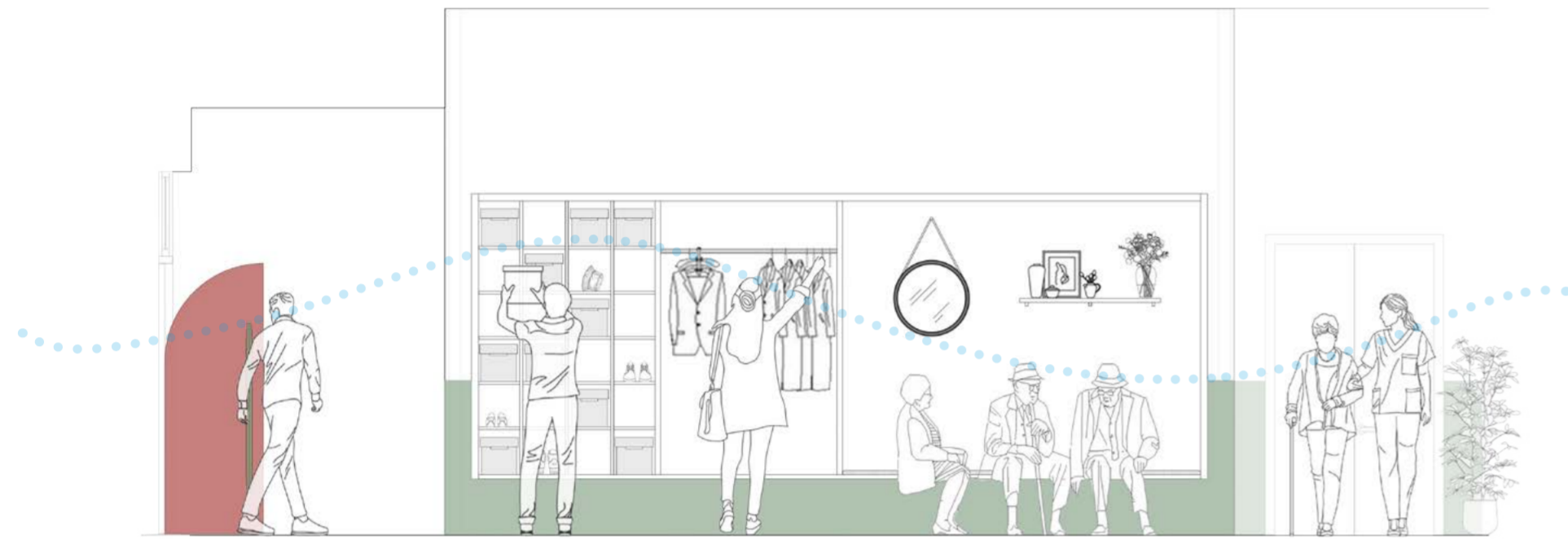
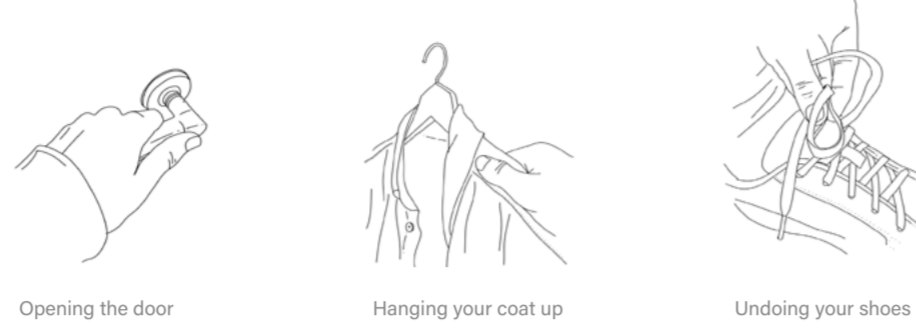
- ① Entrance
- ② Welcome Desk & Day itinerary
- ③ Belongings drop off
- ④ Coat store
- ⑤ Rest
- ⑥ Heart space



23 Welcome Module

Entrance Process

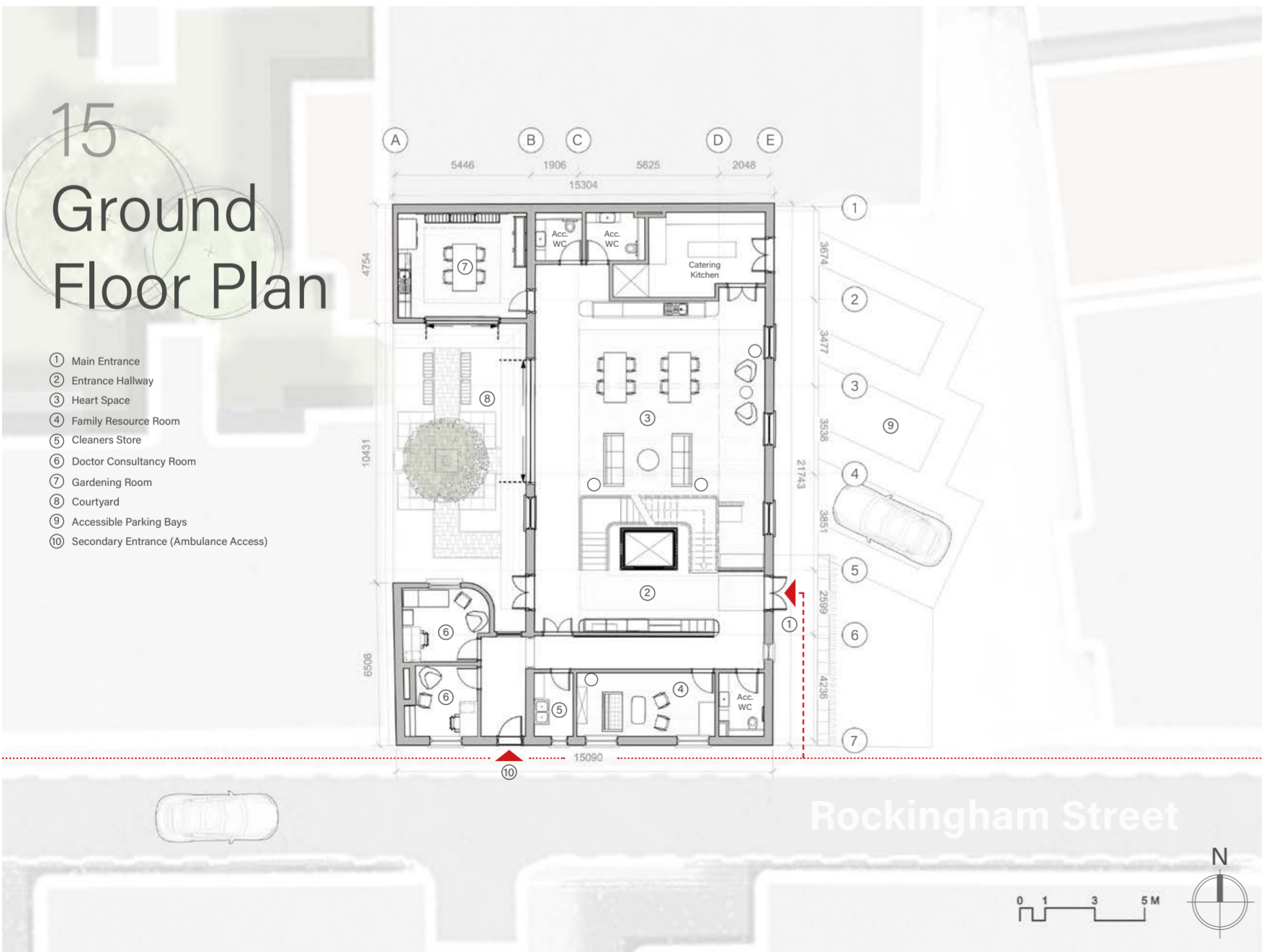
The welcome module is designed around familiarity, it aims to imitate the same experience we have when coming home. From opening the door to hanging up your coat, undoing your shoe laces and putting your slippers on. The module captures this experience in one bespoke piece of built in furniture with different stations for each moment.



Entrance Belongings drop off Coat store Rest spot

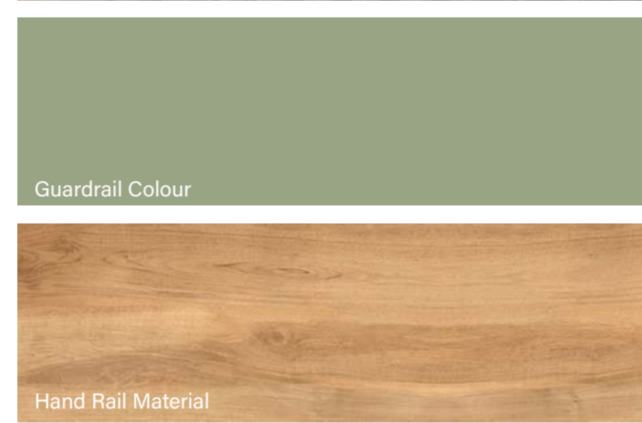


21 Entrance Hallway



25 A Guiding Hand

Way finding Through Touch
 Navigating an unfamiliar environment can be tricky for someone with dementia due to a lack of spatial perception and short term memory loss. To counter this, the design uses a continuous hand rail that leads you through and up the building to different spaces. The design features rounded corners that sweep around the spaces, a path that gently walks you around the building. Our sense of touch can stimulate sensory connections to places and moments in time. The design of this handrail aims to imitate the texture and materiality of handrails in our own homes, giving individuals a greater sense of safety and feeling like they are home.



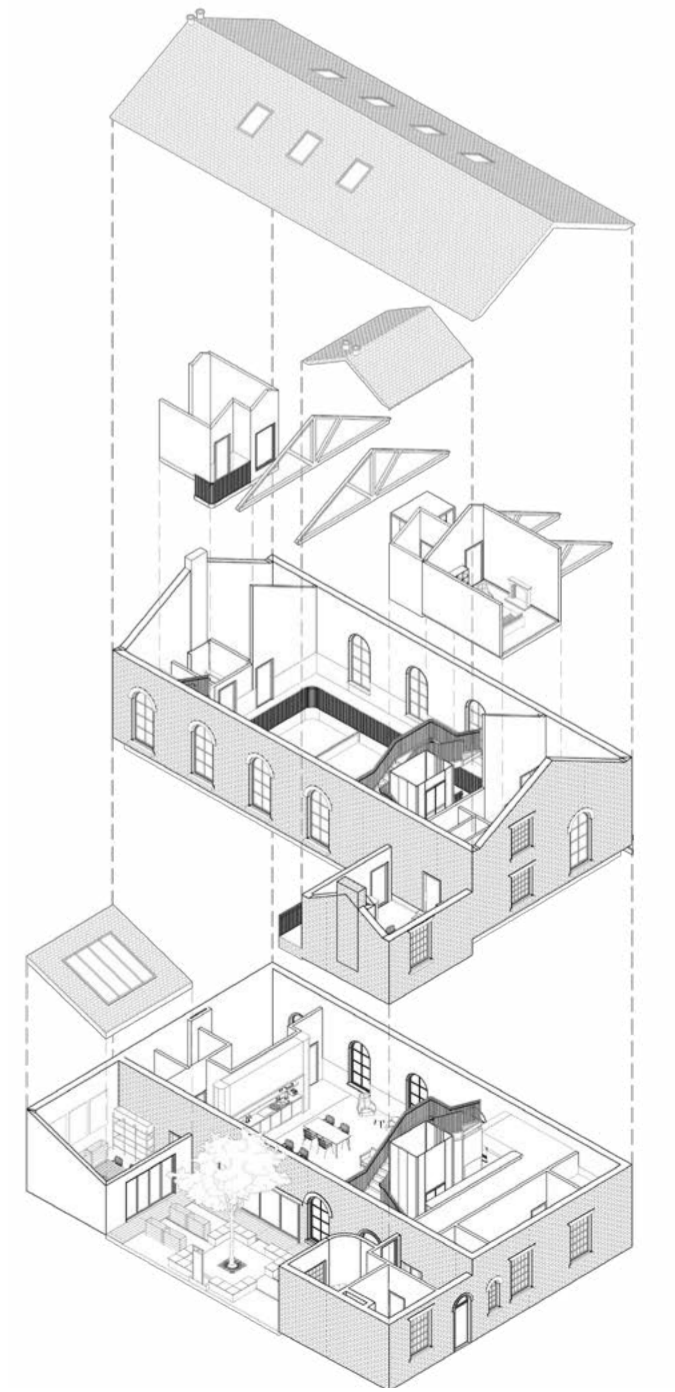
18 Section A

- ① Rockingham Street
- ② Entrance Hallway
- ③ Stair Core
- ④ Heart Space
- ⑤ Family Resource Room
- ⑥ Activation Room 2
- ⑦ Activation Room 3



19 Section B

- ① Car Park
- ② Street Entrance
- ③ Stair Core
- ④ Lift
- ⑤ Truss
- ⑥ Courtyard
- ⑦ Balcony



28 Stair Visual

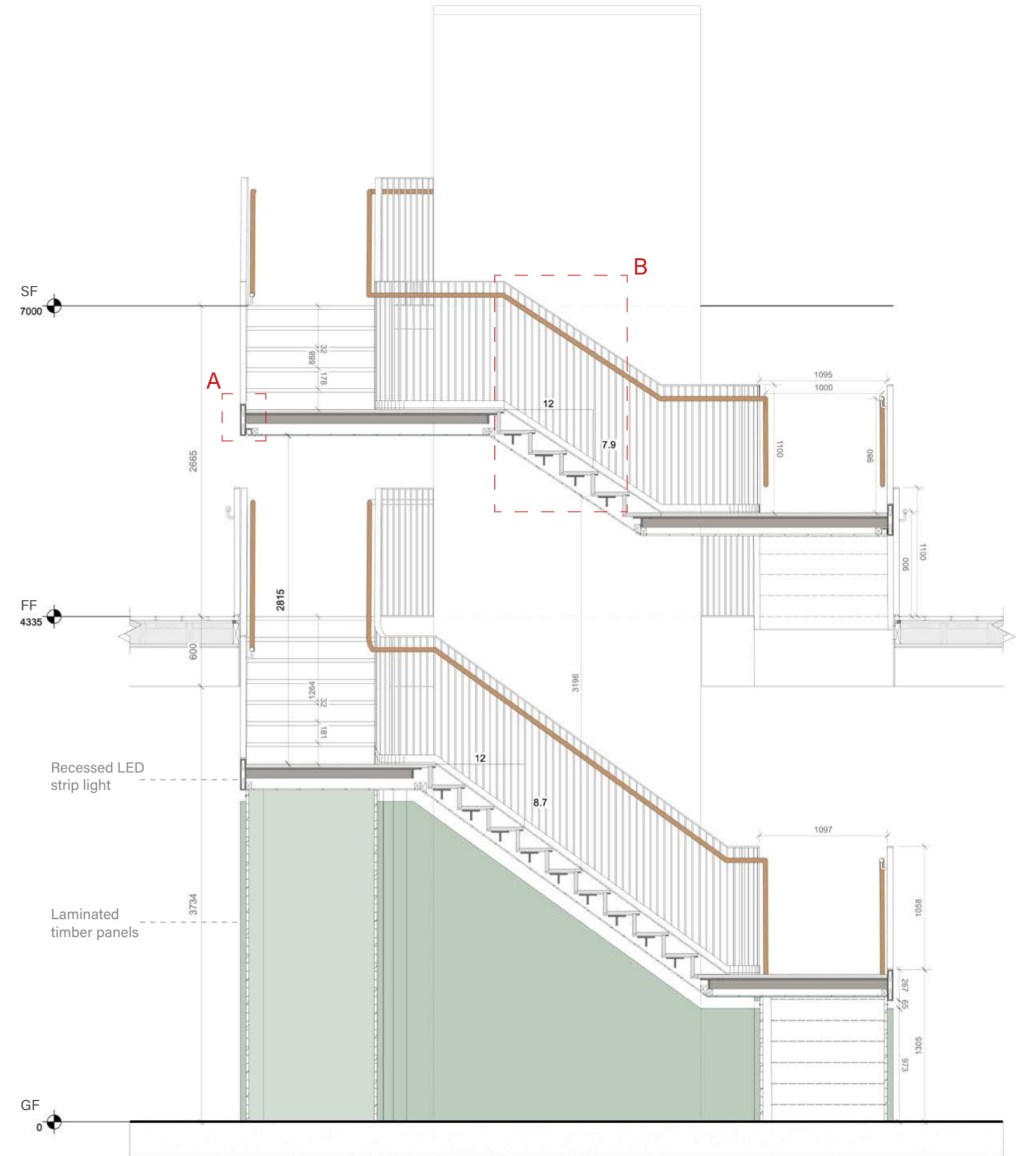
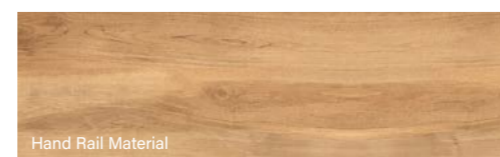
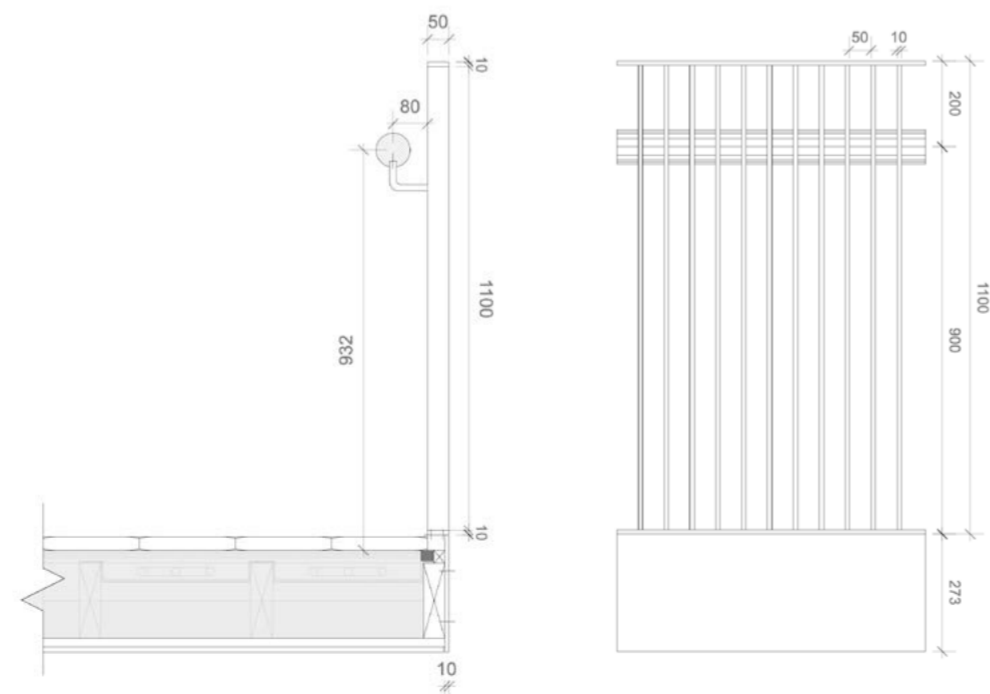


26 Feels Like Home

Way Finding Through Touch - Guardrail Detail

The Handrails throughout the space aim to imitate that of the handrails found in our own homes. This strategy will give individuals a sense of home and safety. The guardrail itself is constructed out of metal fins that allow a degree of light to pass through whilst maintaining a visual barrier between spaces and levels.

The guardrail is extended down in void spaces using a sheet of powder coated metal to match, this increases the visual barrier between levels and creates continuity through the design language.



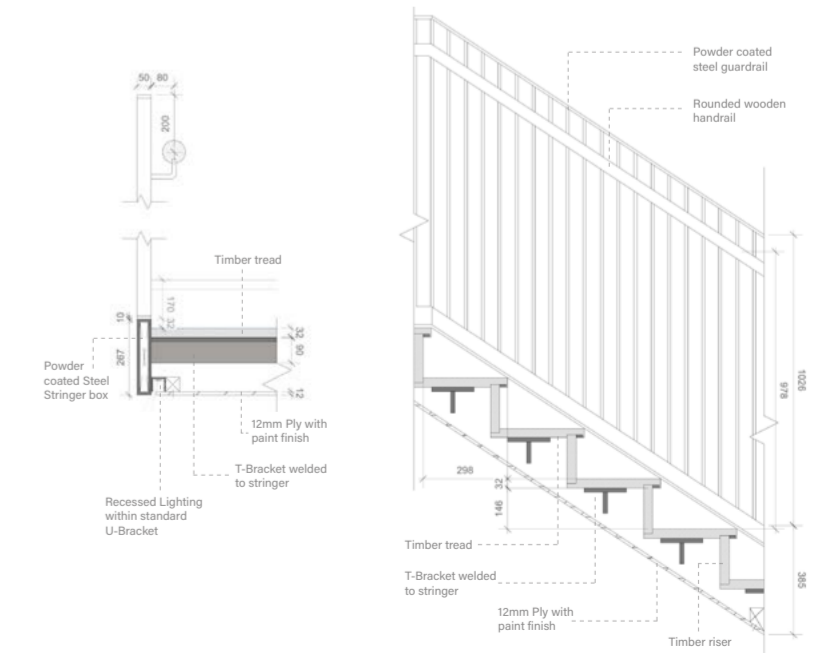
Full Stair Section

27 Stair Detail

Way Finding Through Touch - Stair Details

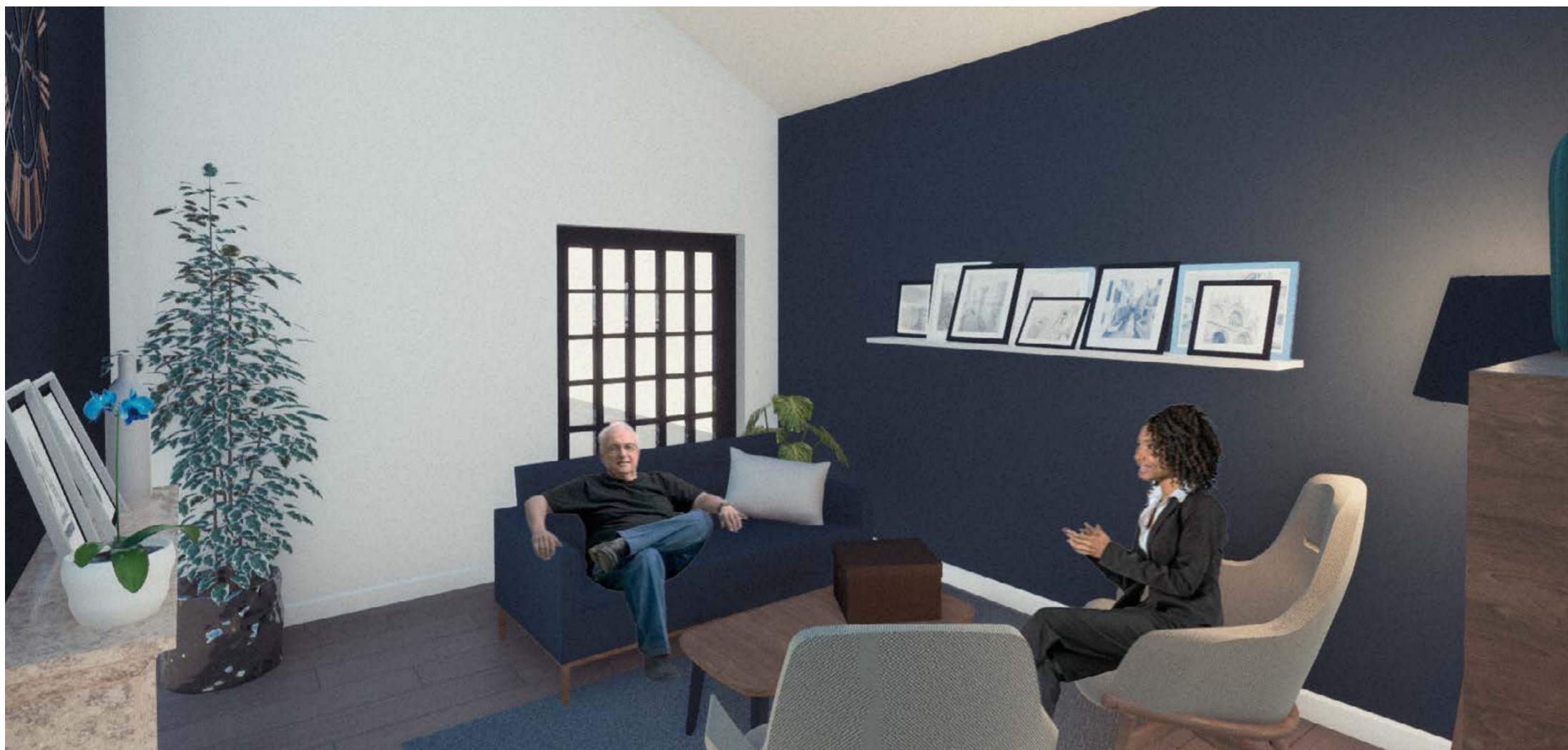
The stair is designed with a detail oriented approach to make it a recognisable feature that serves multiple different spaces. The wooden hand rail is utilised again here to retain consistency from the guardrail, linking the three different levels together through a continuous sense of touch experience.

The ground level section of the stair is encased with a laminated timber shell that provides space for services and serves as storage space for the heart space. This shell contains a recessed lighting detail that helps to separate and ground the stair sections.



Stringer Detail A

Tread & Riser Detail B



31 Activation Rooms

Memories Through Conversation

The Activation rooms act as a conversational space away from distraction. They allow for 1 to 1 processing and conversation to help activate the mind and recall memories. This spatial device aims to mitigate the effects of dementia through memory recall, conversation and sensory stimulation.

The Activation rooms are designed to feel like a living room so patients feel at home and comfortable. These rooms also host the 'memory boxes', a sensory device that uses personal items to evoke memory through the senses.



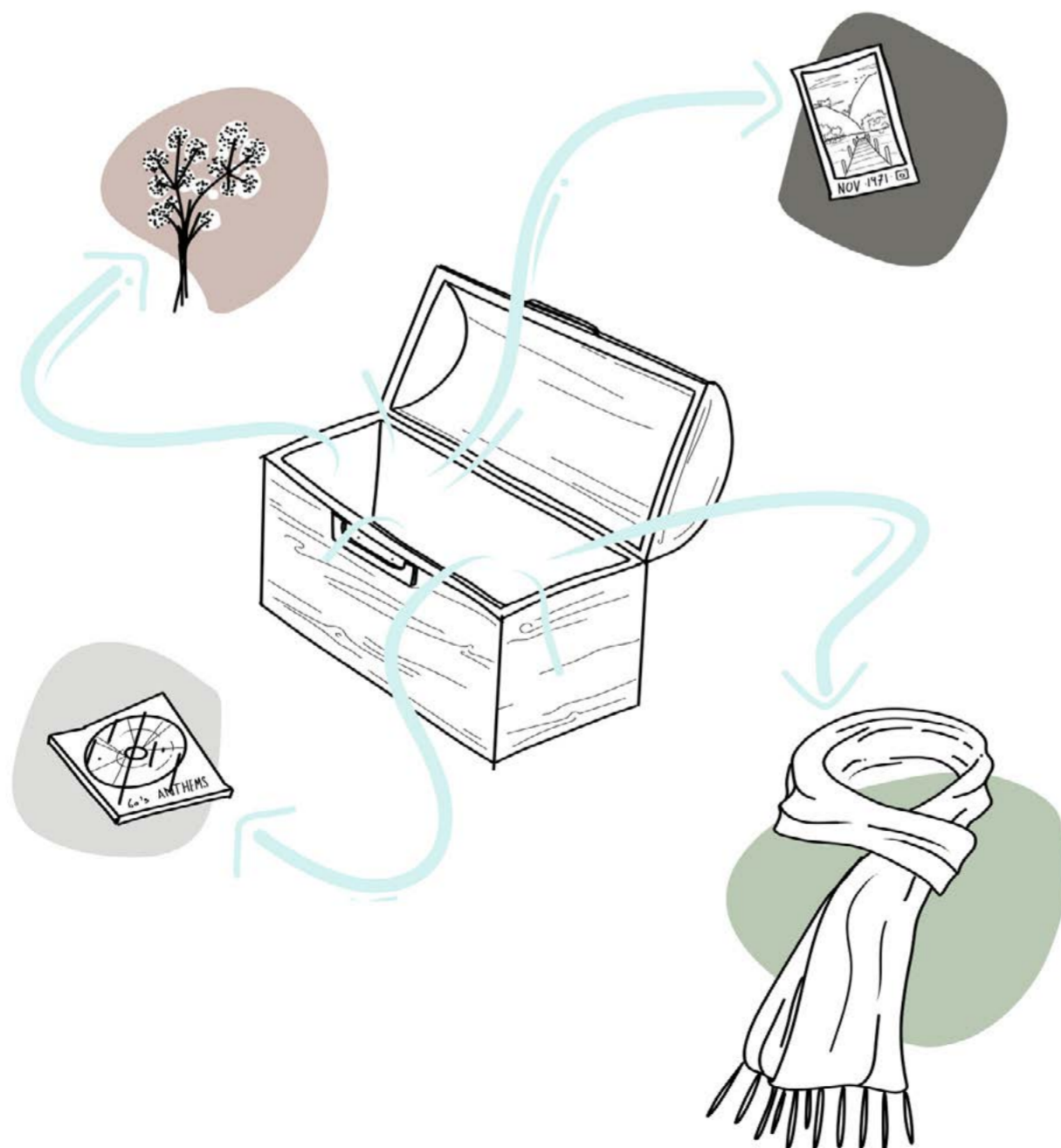
32 Memory Box

Memories Through Conversation

Activation of memory through the senses can be a powerful tool in aiding memory recall, particularly in individuals with dementia. The senses, including sight, smell, touch, taste, and sound, are closely linked to memory formation and retrieval. Stimulating these senses can evoke vivid memories from the past, even when other cognitive functions may be impaired. For instance, the smell of a familiar food or the sound of a beloved song can trigger reminiscences, fostering connections to past experiences and enhancing overall cognitive function. Incorporating sensory activities, such as aromatherapy, music therapy, or tactile stimulation, into daily routines can provide valuable opportunities for individuals with dementia to engage with their surroundings and access stored memories, thereby improving their quality of life.

The activation rooms host this idea of a memory box, a space where individuals can sit and have a conversation about their memories and reminisce about items inside the memory box. The aim is that through conversation and sensory stimulation the effects of dementia can be mitigated or slowed down. Brain activation and stimulation is key to reducing the impact of dementia on peoples lives.

The memory box's could contain personal items brought in by individuals that represent key moments or feelings from their life. That could look like a beloved item of clothing, a photo from a family holiday or maybe their favourite flower. The personal connection to these items will help to evoke conversation and activate the memory.



Smell



Sight



Touch



Sound



33 Gardening Room



34 Courtyard